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Close Air Support Allocation for Extended Counterinsurgency: Is Our Doctrine Lacking?

By

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Abstract

This research paper presents the case for moving the CAS allocation execution function of the ASOC to the CRC for extended low intensity counterinsurgency operations. Due to the classified nature of specific data, interviews from sources (to include weapons and tactics officers, an ASOC commander, CAOC staff, and CAS aircrew) provide the evidence required to support such a change. This paper explains the problem of allocating CAS via a system located at the land component headquarters and that this may not always lead the optimum effects for the ground commander. The solution presented recommends a change to doctrine as to how CAS is allocated during COIN operations. It also recommends increased awareness by land component commanders as to the flexibility and responsiveness and how it cannot be simply treated as an extension of land based capabilities.

Introduction and Thesis

The application of airpower in Iraq and Afghanistan has changed significantly over the last seven years. What began with large-scale air operations against well defined targets has evolved into much lower-scale operations almost completely dedicated to supporting counterinsurgency ground forces. Close Air Support (CAS) execution in support of ongoing counterinsurgency (COIN) operations in Iraq and Afghanistan is allocated by the same doctrinal system that controlled CAS during the initial phases of each conflict. While this system works for high-intensity dynamic combat, this method of CAS allocation does not efficiently meet the needs of the CFLCC for low-intensity and generally static combat operations. The purpose of this research paper is to explain why the doctrinal system of CAS allocation during execution is inefficient in the current COIN environment and how it can lead to unnecessary delays and ineffective air support. In addition, the paper will address how the air component and land component view the efficiency and effectiveness of CAS missions in the COIN environment. Following this frame of reference, a solution to the problems of allocation, efficiency, and effectiveness is presented. Finally, changes to CAS doctrine in support of COIN are recommended along with recommendations to bridge the gap between the air component and land component's view of CAS efficiency and effectiveness.

Research Methodology

For the purposes of this paper, only CAS sorties flown by fighter aircraft were considered. Despite the fact that remotely piloted aircraft (RPA) are being increasingly used in the CAS role in the COIN fight, the CAS allocation process typically does not control them. The reason for this is that RPA aircraft are requested by ground commanders and allocated via

intelligence channels and not operations channels. This means that RPA aircraft are typically not tasked via requests for CAS from the land component. An exception to this is the MQ-9 Reaper. One of the newer RPAs, the Reaper is at times tasked by operations channels and other times by intelligence channels.[1] Additionally, the majority of specific data concerning the numbers and types of CAS sorties requested and flown in Iraq and Afghanistan and the effectiveness of their missions remains in classified databases. Therefore, in order to lend credence to the argument presented here, current and former OIF and OEF weapons and tactics officers (those in the best position to provide insight into current CAS operations in support of COIN) provided unclassified evidence via interview that corroborates the problem as well as the solution. These weapons officers hail from CAS fighter aircraft, command and control, and air operations center perspectives.

Basic Terminology and Processes

According to Joint Publication 3-09.3, CAS is defined as "air action by fixed-wing (FW) and rotary-wing (RW) aircraft against hostile targets that are in close proximity to friendly forces, and requires detailed integration of each air mission with the fire and movement of those forces.[2]" JP 3-09.3 also notes that while actual execution such as expending ordnance to support ground forces occurs at the tactical level, the apportionment and allocation process occurs at the operational level. The ground commander (JFLCC) is responsible for submitting a prioritized list of air support requirements to the JFACC in order to plan CAS sorties to meet those requirements. It is the responsibility of the JFACC to plan CAS sorties to meet the ground commander's air support requirements. The plan results in an air tasking order (ATO) that directs CAS sortie times and locations to meet the JFLCC air support requests.[3] It is typical that

the number of CAS requests from subordinate land component units will exceed the number of

CAS sorties available to support them. In fact, in 2008, representatives of the Air Support

Operations Group in OIF report that air support requests exceeded available sorties by a margin

of up to 3 to 1.[4] Therefore, it is extremely important that the JFLCC communicate the priority

for air support requests clearly.

CAS command and control is a very complex process. In order to simplify the discussion

and argument, this paper will only consider JFACC apportioned CAS supporting Army ground

operations under the JFLCC. While doctrine provides methods to command and control CAS

across all of the services, it is beyond the scope of this paper. The overarching control

mechanism for air assets within the Air Force is the theater air control system (TACS), the

JFACC's means for orchestrating component air operations.[5] While the air operations center

(AOC) retains control of this system, CAS execution is delegated to subordinate control

agencies. The control and reporting center (CRC), and air support operations center (ASOC) are

the agencies primarily responsible for the real time control of CAS execution. Specific to CAS,

the CRC performs airspace coordination and aircraft deconfliction functions. This includes

allocating volumes of airspace to land and air operations and ensuring separation of all aircraft

and surface to surface fires. Additionally, the CRC accomplishes air component force

accountability, maintains awareness of the ATO, and is responsible for airborne fuel allocation.

According to CRC personnel, fuel allocation can prove to be one of the most challenging tasks as

requirements for air support change during execution as land component requirements for air

support change.[6] The CRC however, does not make decisions on CAS sortie allocation – this is

reserved for the ASOC.[7]

The ASOC is subordinate to the JFACC through the AOC and is normally located with the land component headquarters according to current doctrine. The ASOC's function is to assist and coordinate with preplanned or ATO tasked CAS missions as well as to process immediate CAS requests.[8] Immediate CAS requests are requests for air support that were not requested during planning and are not tasked on the ATO. Immediate requests are almost always time sensitive in nature. An example scenario could begin with a land unit unexpectedly taking fire from the enemy. If the land unit is unable to suppress to enemy fire with organic capability the local ground commander may request immediate CAS to neutralize the enemy position. The ASOC, with authority from the AOC, can then re-task an airborne CAS mission or scramble an alert CAS mission to support the request.[9]

Since the ASOC is doctrinally resident with the land component headquarters, it is very easy for the JFLCC to communicate immediate CAS requests to the ASOC. The early stages of OIF and OEF highlight the advantages of an ASOC co-located with the land component headquarters. The beginning phase of OIF, from March to May 2003, was characterized by a linear battlefield with the advancing land component steadily destroying or disbanding the Iraqi ground forces. According to multiple weapons and tactics officers in both tactical and operational roles, the CFLCC requirements and priorities for CAS were intense and continuously changing. CAS aircrews reported that the ground scheme of maneuver changed significantly from one sortie to the next. They also reported frequent ATO changes and high rates of weapons expenditure.[10] This type of combat environment is well suited to having an ASOC that is responsive to the JFLCC and the continuously changing requirements and priorities for CAS. In fact, some aircrew that flew CAS missions during the initial stages of OIF reported that the majority of their weapons expenditures were the result of immediate taskings from the ASOC

passed directly from the land component headquarters.[11] Clearly, the co-location of the ASOC

and the land component headquarters has the advantage of ensuring a timely response. Another

distinguishing characteristic of the initial phases of OIF is the volume of immediate CAS

requests. The ASOC proves its worth in coordinating immediate CAS requests and quickly

allocating aircraft to support those requests. Although specific details remain classified, aircrew

that flew CAS missions in both the initial and follow-on phases of OIF report that the volume of

immediate CAS requests was much higher during the major combat operations period of mid

2003 than during follow on ground support operations.[12] This evidence suggests that while an

organization such as the CRC can effectively deconflict and account for aircraft, the ASOC,

physically located with the land component headquarters, is the only organization that can keep

up with the near continuous rate of change of JFLCC air support requirements during a dynamic

conventional conflict.

The characteristics of OIF changed dramatically after the end of major combat operations

in May 2003. First, with the Iraqi military all but virtually destroyed or disbanded, the coalition

forces enjoyed total air supremacy over the entire country. Second, the linear battlefield of the

invasion disappeared. Fire support coordination measures such as the fire support coordination

line (FSCL) and forward line of troops (FLOT) that govern whose authority is required to

employ air to surface munitions no longer existed. On the linear battlefield, aircrews require

land component approval prior to weapons release on the friendly side of the FSCL. Air attacks

between the FSCL and the FLOT require coordination with land component surface-to-surface

fires, but do not generally require land component approval.[13] Effectively, after the end of major

combat operations, air component aircrews required land component approval prior to any

weapons release anywhere in Iraq due to the possibility of friendly troop in the vicinity. The

second major difference was the drastically reduced requirement for friendly CAS sorties. With no fielded military forces to impede land component progress, there was simply no need for the volume of CAS sorties flown during major combat operations. However, as is now well-known, insurgent forces rose to challenge land component occupation and the transition to a stable civil government.

As the COIN fight evolved over time, the land component required fewer kinetics and more intelligence, surveillance, and reconnaissance (ISR) support. In order to maintain timely airborne on call options, the land component began requesting armed overwatch (AO) and armed reconnaissance (AR) support from the air component. Remotely piloted aircraft such as the MQ-1 Predator and later the MQ-9 Reaper fulfilled this role in part. CAS fighter sorties fulfilled the remainder with the option to re-task these missions to support ground forces requiring airborne fires. By the summer of 2007, virtually all fighter CAS sorties in Iraq departed on missions to support the land component with either AO or AR.[14] Ill-defined in military doctrine, AO is essentially ISR support to ground forces outside a protected area such as forward operating base (FOB). An example of armed overwatch includes using electro-optical sensors to search for threats to a friendly convoy or using the same sensors to search for threats to friendly forces conducting a building search or raid operation. If threats to the friendly forces are discovered, and the ground commander elects to use air-to-surface weapons, the AO sortie effectively becomes a CAS sortie. AR is different from AO in that fighter aircraft support friendly forces that are located inside protected areas. In this role, CAS aircraft typically search for threats such as indirect fire sites, mortar tubes, and improvised explosive devices. Typically, the land component will direct CAS aircrews to search areas of recent or predicted enemy activity. The AO sortie became a CAS sortie if threats were encountered and the ground commander desired

an air to surface weapons response. It is reasonable to conclude that the AO and AR tasks were developed in an effort to keep CAS capable fighters airborne should the ground commander desire their capabilities.

The land component commander with advice and input from the JFACC via the ACCE develop the priority for CAS in OIF.[15] Although the priority can change over time, it has generally remained the same for the past several years.[16] Missions such as AO and AR receive the lowest level of priority while missions in support of high priority operations or troops in contact (TIC) receive the highest priority. The most common re-tasking of fighter aircraft in the steady state COIN operation in Iraq is to support TIC situations. TIC imply that friendly ground forces have made contact with and are threatened by an enemy in the near proximity. It is the local ground commander's prerogative to formally declare a TIC and inform higher land component headquarters of the situation. If the local ground commander requires CAS to neutralize the enemy, then that request is passed to the land component headquarters as well. Once the land component headquarters approves the CAS request, they inform the ASOC that a TIC is in progress and to re-task either an airborne AR/AO mission or launch a CAS alert sortie to cover the TIC. In order to appreciate the nature of how CAS is used to support a TIC in the COIN environment, it is helpful to consider two example scenarios.

Assume that a ground unit is conducting urban operations with no air component support. At some point, the unit begins to receive small arms fire from enemy insurgents in a nearby building. After seeking cover and stabilizing the situation, the small arms fire continues and then the unit begins receiving mortar rounds from another nearby building. The unit commander then declares a TIC and requests CAS from the air component. After running through the previously described approval process, a flight of two F-16s arrives overhead after being re-tasked from a

nearby AR mission. The joint terminal attack controller (JTAC), the air component liaison

between the ground unit commander and the aircraft, describes the situation to include friendly

and enemy locations. Due to the urban environment, communications are difficult and before the

CAS aircraft can release weapons on the insurgent sites, they must refuel. The average refueling

time in Iraq is 30 minutes to include transit to and from the tanker.[17] By the time the aircraft

return, the ground unit has suffered casualties due to the inability to destroy the enemy mortar

position. The reason that no additional aircraft were on scene to cover for the TIC was that the

land component headquarters will not allow the ASOC to task more than one flight at a time to

any particular operation. In fact, it is evident that if the ASOC had tasked additional aircraft to

the TIC, friendly casualties could have been avoided. This is not necessarily the fault of the

ASOC.

The second scenario focuses on CAS aircraft supporting search and raid operations.

Generally conducted by special operations forces (SOF), search and raid missions conduct

operations against high value targets or individuals. Normally, CAS fighters execute AO of the

SOF during the mission focusing their sensors on potential nearby threats. Often, these raids

result in multiple individuals – referred to as squirters – fleeing the site of the raid. Since the

missions are primarily conducted during the hours of darkness it is necessary to use airborne

sensors to track the squirters – one of whom could be the sought after high value individual. Due

to the potential number of persons or vehicles fleeing the scene, more than two airborne sensors

are often required.

The reason that no additional aircraft were on scene to cover for the TIC or provide

sensors for the raid was that the land component priorities generally do not allow the ASOC to

task more than one flight of CAS fighters at a time to any particular operation. In fact, it is

evident that if the ASOC had tasked additional aircraft to the TIC, friendly casualties could have been avoided or additional enemy individuals tracked. While processes are improving, there are several reasons for this disconnect. The first reason looks specifically at operations in OIF. Although the ASOC is subordinate to the JFACC through the AOC, the land component has made it a priority that each division within Iraq has immediate access to a flight of CAS. The land in Iraq is divided into multiple regions with each containing a division responsible for military operations. The land component prioritizes CAS for each division – essentially, CAS fighters do not cross division lines except in dire circumstances. An example illustrates this point. CAS fighters conducting low priority AR in support of an adjacent division would rarely be re-tasked to support a TIC already supported by another flight. The land component leadership argues that the flight supporting the TIC should be able to maintain coverage even with refueling by sending CAS fighters to their tankers as singles instead of in pairs.[18] This presents a problem for air component leadership. According to an OIF operations group commander, CAS fighters train to fight and support ground units as pairs – not singles. The concept of airborne mutual support is critical to ensuring accurate and timely effects provided to the ground commander. As General McCrystal has made clear in his recent COIN guidance in Afghanistan, it is better to allow an enemy to escape than to make a mistake that would result in civilian casualties. CAS execution as a pair ensures that aircrew have the opportunity to challenge and confirm weapon instructions while clearing for possible collateral damage concerns. Although single aircraft CAS operations are possible, they are not recommended in other than extreme situations.[19]

The second reason for the disconnect in ASOC CAS fighter allocation is the amount of situational awareness available to the ASOC. According the OIF ASOC commander in 2008, the

ASOC does have the best awareness of any air component function on the status of the fight on the ground. It also maintains good awareness on the scheduled CAS missions and their mission locations. The ASOC even has knowledge of planned aerial refueling events.[20] However, the ASOC does not maintain awareness of realtime changes to aerial refueling plans, non-CAS aircraft, the relative positions of CAS aircraft during en route status, or current airspace usage. The organization that does have this capability is the CRC. According one OIF command and control weapons officer, the CRC in OIF has the capability and capacity to effectively and efficiently track all aircraft in the Iraqi theater as well as provide very timely and accurate deconfliction of those aircraft. They act as the primary command and control for all aircraft in the theater and are extremely effective at managing the precious airborne fuel for the CAS fighters.[21]

The lack of complete data by either the CRC or the ASOC makes CAS allocation more laborious than necessary. An example explains why. Assume that a TIC occurs, CAS is requested and the ASOC selects an airborne flight to support the TIC. In order to move the flight, the ASOC must coordinate with the CRC and have the aircrew contact the ASOC for the new mission instructions. Following this, the aircrew must then contact the CRC to coordinate for transit and new mission airspace. This is cumbersome for both the aircrew and the ground controlling agencies. While this current system is workable, it is not optimal for the COIN environment. During major combat operations (MCO), targets tend to be fixed, however, COIN targets tend to be fleeting in nature. A group of enemy individuals detected in the act of emplacing and IED will not wait to be targeted like a fixed structure.

Solutions

     In order to improve response time and CAS mission effectiveness in the low intensity COIN environment, the ASOC should physically merge its CAS allocation functions with the CRC. This would free ASOC personnel from burdensome land component oversight and give them access to the high fidelity real time information available to the CRC controllers. Even given today's technology, it is impractical to consider this change to doctrine for high intensity conflict. The intent of this change is to only merge the real time CAS control fuctions into a single entity. It is not to eliminate the capacity of the ASOC to participate in land component planning. In the current low intensity COIN combat environment, all air component combat missions are dedicated to land component support. During high intensity combat operations, such as the first two months of OIF, the air component executes counter-air and interdiction in addition to CAS. It would be nearly impossible for the CRC to sort out land component CAS requirements in addition to their other duties. The CRC plays a major role in assisting to execute missions other than CAS, and it would be nearly impossible for the CRC to sort out land component CAS requirements in addition to their other duties. In the low-intensity conflict, the air environment is permissive and the workload and capability of the CRC to support CAS increases significantly.[22] Another reason that these functions can be merged in the low intensity COIN environment is that the land component priorities for air support change very little over time. Even if there were to be changes to the priorities, the land component could easily communicate this to the ASOC control function resident within the CRC.

     This kind of doctrinal shift has great appeal to air component commanders that desire greater control and autonomy over the execution of CAS. Conversations with air component leadership at the Combined Air and Space Operations Center in Al Udeid, Qatar, reveal that

there is significant doubt that the land component understands better than the air component as to how CAS should be executed.[23] However, land component commanders would typically disagree with this mindset. Due to doctrine and recent execution, land component commanders count on being able to keep a finger on CAS allocation via their resident ASOC. According to one ASOC commander from OIF in 2008, the land component HQ made it very clear that the resident ASOC was their tool to ensure CAS was provided exactly as requested – not necessarily via method that achieved optimum effects. Essentially, the land component commanders were looking for capability without regard to effects provided by that capability.[24]

This demonstrates the limited method of land component thinking about CAS. Due to the technological revolution in the command and control capability of the CRC, CAS response time in OIF is generally in the single digit minutes.[25] Aircraft supporting one ground commander on a pre-planned ATO CAS mission can be re-roled into another area of operations very quickly. Ground commanders in OIF tend to be very protective of the pre-planned air missions allocated via the ATO. Evidence of this is given in that the land component HQ requires the ASOC to get supported ground commander permission prior to moving their assigned CAS aircraft to other higher priority missions. This means that a flight of CAS aircraft executing a very low return AR mission for one ground commander often cannot get permission from that ground commander through the ASOC to support another ground commander engaged in a TIC situation. Ground commanders have made it very clear that once they have CAS aircraft assigned via the ATO, they are very reluctant to let them go.

Solutions to this problem of thinking about the inherent speed and flexibility of airpower, and especially CAS, go back to training and education. The Air Force preaches these tenets of airpower to its officers prior to commissioning and continues to do so throughout formal training

and professional military education. Those involved in the command, control, and execution of CAS train extensively to understand land operations and how airpower can best support those operations. Land component services, especially the Army, must understand that CAS is not the same type of weapon as artillery. It is more flexible and responsive than any land maneuver unit and is best allocated by those that best understand how to maximize its capabilities and minimize its limitations. One could argue that organic fires from rotary wing or artillery could be just as responsive to air. In the cases of short distances or lack of collateral damage concerns this may be true. However, CAS fighter aircraft can avoid COIN environment surface to air threats while providing a god's eye view of the environment to help mitigate collateral damage.

Land component commanders must also understand that CAS aircraft are not optimized for ISR missions such as armed overwatch and armed reconnaissance. Anecdotal evidence from aircrews that have flown CAS missions in OIF and OEF suggest that the success rate of finding IEDs or enemy mortars is extremely low. In fact, interviews with CAOC personnel strongly indicate that of the CAS aircraft reported IEDs, less than one percent were actual IEDs. The reason for this is that overhead sensors – those on CAS and ISR aircraft – are not optimized for detecting objects as small as IEDs. The same can be said for mortar tubes. While it is possible for CAS aircraft to find them, it is very unlikely that they will actually do so. Conversations with representatives of ground commanders in OIF verify that there is little understanding of the limited effectiveness of CAS aircraft executing the AR mission. The Air Force must do a better job at the higher command levels of communicating to their ground commander equivalents just how ineffective CAS aircraft are at AR.

Conclusion

The current control system for CAS aircraft in the COIN fight is cumbersome and often results in airpower not fully achieving the ground component's intent. Current procedures follow the current doctrine of an ASOC collocated with the land component headquarters to make real time CAS allocation decision. Evidence suggests that this arrangement leads to inefficient execution since CAS is not optimally allocated to provide the ground commander's desired effects. There are two reasons for this. First, the land component prioritizes capability over achieving effects. This is evident in that the land component CAS priorities are set to ensure that each geographic division has access to CAS. Because of this, the ASOC will rarely allocate CAS to another division except in extreme circumstances. Since these extreme circumstances rarely occur, CAS for TICs and other time sensitive operations is either delayed or not optimal.

Second, new situational awareness technology allows the CRC to maintain awareness on the entire battlespace. Making the situational awareness technology available to the ASOC, while potentially advantageous, expends resources and does not solve the problem of CAS fighters coordinating with two different agencies during execution. OIF weapons and tactics officers in both command and control and aircrew positions report that working with two agencies for CAS coordination causes unnecessary delays in allocating CAS during execution. Since targets are generally fleeting and very time sensitive in the COIN operations, the fastest response possible is required for CAS.

The solution for this problem is to merge the CAS allocation functions of the ASOC into the technologically advanced CRC. The intent of this merge is not to physically relocate the entire ASOC, but only the execution function. The ASOC presence with the land component is

still required for planning and other coordination. Additionally, education for both air and ground commanders must include the effectiveness of emerging CAS missions such as AO and AR. While CAS sorties have the capability to execute these missions, they are typically low-return, and commanders should not hesitate to re-task airborne CAS missions to help support more pressing situations such as TICs or other fleeting targets. The focus of doctrine and education should stress that the land component should request a desired effect while allowing the air component to find the best fit in order to meet that intent. Only then will CAS truly realize its fullest effectiveness and efficiency in the COIN fight.

[1] Interview with multiple OIF weapons and tactics officers. 2008.

[2] Joint Publication 3-09.3. I-1.

[3] Join Publication 3-09.3. I-3 through I-5.

[4] Interview with OIF EASOG/CD. 2008.

[5] Joint Publication 3-09.3. II-4.

[6] Interview with OIF Weapons and Tactic Officer. 2008.

[7] Interview with OIF Weapons and Tactic Officer. 2008.

[8] Joint Publication 3-09.3. II-6.

[9] Joint Publication 3-09.3. II-7.

[10] Interview with OIF Weapons and Tactic Officer. 2008-2010.

[11] Interview with OIF Weapons and Tactic Officer. 2008.

[12] Interview with OIF Weapons and Tactic Officer. 2008.

[13] Joint Publication 3-09.3.

[14] Interview with Operation Iraqi Freedom. Weapons and Tactics Officers 2010.

[15] Interview with ASOC/CC, OIF. 2008.

[16] Interview with OIF WTO, 2010.

[17] Interview with OIF WTO. 2008.

[18] Interview with OIF ASOC/CC. 2008.

[19] Interview with OIF OG/CC. 2008.

[20] Interview with OIF ASOC/CC. 2008.

[21] Interview with OIF WTO. 2008.

[22] Ibid.

[23] Intervew with USAFCENT CAOC Staff. 2008.

[24] Interview with OIF ASOC/CC. 2008.

[25] Interveiw the OIF Weapons and Tactics Officer. 2008.
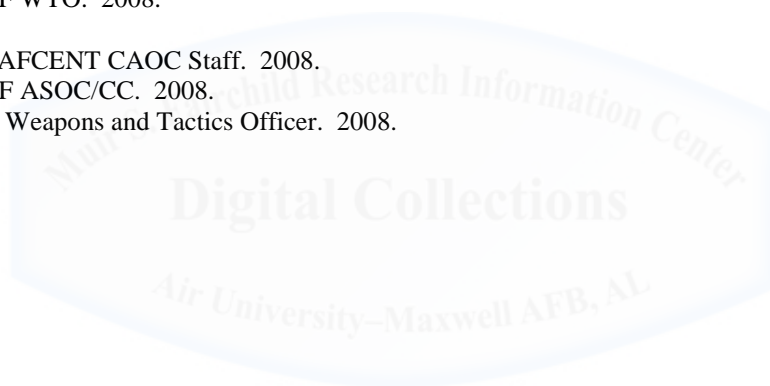
Bibliography

Joint Publication (JP) 3-09.3. *Close Air Support*, 8 July 2009.